

## IMAGE LINKED WITH IMAGE PROCESSING STATION

### ABSTRACT

5 A digital video camera is coupled with an image processing station by a tether that  
has a bandwidth. The processing station has a memory with a program that executes  
instructions. When application software on the station requests a driver on the station to  
operate the camera at a specific frame rate, the program determines whether the requested  
frame rate is higher than permitted by the tether bandwidth. If that is so, the program  
10 computes a maximum permitted frame rate and an integration time of the pixels of the  
camera. The integration time causes the camera to produce output video frames at a rate  
commensurate with the computed bandwidth constrained frame rate, instead of the requested  
frame rate. The program then adjusts the gain accordingly.